

Form 1449 (modified)

Docket: 730/002

S.S.N. 09/593,316

**Information Disclosure
Statement By Applicant**

Title: Animal Tissue For Xenotransplantation
Inventors: Clark, John, et al.

(Use Several Sheets if Necessary)

Filing Date: June 13, 2000

Group: 1643

U.S. Patent Documents

Examiner Initial	Ref.	Patent No.	Filing Date	Issue Date	Class/ Subclass	Inventors:	Title:
JL	A	5,464,764	02/04/93	11/07/95	435/172.3	Capecchi, M.R., et al.	Positive-Negative Selection Methods and Vectors
	B	5,589,369	05/31/94	12/31/96	435/172.3	Seidman, J., et al.	Cells Homozygous For Disrupted Target Loci
	C	5,631,153	06/05/95	05/20/97	435/172.3	Capecchi, M.R., et al.	Cells and Non-Human Organisms Containing Predetermined Genomic Modifications and Positive-Negative Selection Methods and Vectors For Making Same
	D	5,776,774	10/23/95	07/07/98	435/325	Amara, S., et al.	Amino Acid Transporters and Uses
	E	5,789,215	08/07/97	08/04/98	435/172.3	Berns, A., et al.	Gene Targeting In Animal Cells Using Isogenic DNA Constructs
	F	5,821,117	03/15/94	10/13/98	435/320.1	Sandrin, M.S., et al.	Xenotransplantation Therapies
	G	5,849,991	01/26/95	12/15/98	800/2	D'Apice, A., et al.	Mice Homozygous For An Inactivated α 1,3-Galactosyl Transferase Gene
	H	5,977,079	09/23/97	11/02/99	514/025	Good, A., et al.	Compositions for Attenuating Antibody-mediated Xenograft Rejection in Human Recipients
	I	6,011,197	01/28/99	01/04/00	800/24	Strelchenko, N., et al.	Method of Cloning Bovines Using Reprogrammed Non-Embryonic Bovine Cells
JL	J	6,020,172	04/20/98	02/01/00	435/91.41	Both, G., et al.	Nucleic Acid Delivery With Ovine Adenoviral Vectors

Foreign Patent or Published Foreign Patent Application

Examiner Initial	Ref.	Document No.	Publ. Date	Jurisdiction	Title:	Translation	
						Yes	No
JL	K	WO 95/28412	10/26/95	PCT	α (1,3) Galactosyltransferase Negative Swine		
	L	WO 95/33828	12/14/95	PCT	Modified Cells and Methods for Inhibiting Hyperacute Rejection of Xenogeneic Transplants		
	M	WO 97/07669	03/06/97	PCT	Quiescent Cell Populations For Nuclear Transfer		
	N	WO 97/11601	04/03/97	PCT	Method for Prevention of Xenograft Rejection by Transplant Recipients		
	O	WO 97/12035	04/03/97	PCT	Transgenic Animals for Xenotransplantation with Reduced Antibody-Mediated Rejection		
	P	WO 97/20035	06/05/97	PCT	Establishment, Maintenance, and Transfection of Totipotent Embryonic Stem Cells From The Embryos of Domestic Animals		
	Q	WO 98/42750	10/01/98	PCT	Antigenic Fusionprotein Carrying Gal. agr. 1, 3Gal Epitopes		
	R	WO 98/48005	10/29/98	PCT	Targeted Gene Modification by Parvoviral Vectors		
	S	WO 99/01164	01/14/99	PCT	Cloning Pigs Using Donor Nuclei From Differentiated Cells		
JL	T	WO 99/19469	04/22/99	PCT	Porcine Stem Cells Comprising A Marker Under An Oct-4 Promoter		

Examiner	Date Considered
<i>E. J. J.</i>	11/5/01

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Examiner Initial	Ref.	Document No.	Publ. Date	Jurisdiction	Title:	Translation	
						Yes	No
J	U	WO 99/21415	05/06/99	PCT	Nuclear Transfer For Production Of Transgenic Animal Embryo		

Other Documents

Examiner Initial	Ref.	Author, Title, Date, Source
J	V	Blake, D., et al., "An α -D-Galactosyltransferase Activity in Ehrlich Ascites Tumor Cells", <i>J. Biol. Chem.</i> , 256 (11):5387-93(1981)
	W	Campbell, K.H.S., et al., "Sheep cloned by nuclear transfer from a cultured cell line", <i>Nature</i> , 380 (7):64-66(1996)
	X	Cohney, S., et al., "Down-Regulation of Gal α (1,3) Gal Expression by α 1,2-Fucosyltransferase: further characterization of α 1,2-fucosyltransferase transgenic mice", <i>Transplantation</i> , 64 (3):495-500(1997)
	Y	Cole-Strauss, A., et al., "Correction of the Mutation Responsible for Sickle cell Anemia by an RNA-DNA Oligonucleotide", <i>Science</i> , 273 :1386-89(1996)
	Z	Costa, C., et al., "Comparative analysis of three genetic modifications designed to inhibit human serum-mediated cytotoxicity", <i>Xenotransplantation</i> , 6 (1):6-16(1999)
	AA	Costache, M., et al., "Evolution of fucosyltransferase genes in vertebrates", <i>J Biol Chem</i> , 272 (47):29721-8(1997)
	AB	Cowley, G., "A Pig May Someday Save Your Life", <i>Newsweek</i> , January 1, 2000
	AC	Dabkowski, PL., et al., "Characterization of a cDNA clone encoding the pig α 1,3 galactosyltransferase: implications for xenotransplantation", <i>Transplant Proc</i> , 25 (5):2921(1993)
	AD	Dabkowski, PL., et al., "Isolation of a cDNA clone encoding the pig α 1,3 galactosyltransferase", <i>Transplant Proc</i> , 26 (3):1335(1994)
	AE	Galili, U., et al., "Gene sequences suggest inactivation of α -1,3-galactosyltransferase in catarrhines after the divergence of apes from monkeys", <i>Proc. Natl. Acad. Sci. USA</i> , 88 :7401-7404(1991)
	AF	Gustafsson, K., " α 1,3galactosyltransferase: a target for in vivo genetic manipulation in xenotransplantation", <i>Immunol Rev</i> , 141 :59-70(1994)
	AG	Hasty, P., et al., "Target Frequency and Integration Pattern for Insertion and Replacement Vectors in Embryonic Stem Cells", <i>Mol Cell Bio</i> , 11 (9):4509-4517(1991)
	EH	Hasty, P., et al., "The Length of Homology Required for Gene Targeting in Embryonic Stem Cells", <i>Molecular and Cellular Biology</i> , 11 (11):5586-5591 (1991)
	AI	Hayashi, S., et al., "Adenovirus-mediated gene transfer of antisense ribozyme for α (1,3)galactosyltransferase gene and α (1,2) fucosyltransferase gene in xenotransplantation", <i>Transplant Proc</i> , 29 (4):2213(1997)
	AJ	Hayes, H., et al., "Localization of ZNF164, ZNF146, GGRA1, SOX2, RPLR and EEF2 on Homoeologous Cattle, sheep and Goat Chromosomes by Fluorescent Situ Hybridization and Comparison with the Human Gene Map", <i>Cytogenet Cell Genet</i> , 72 :342-246 (1996)
	AK	Henion, TR., et al., "Defining the minimal size of catalytically active primate α 1,3 galactosyltransferase: structure-function studies on the recombinant truncated enzyme", <i>Glycobiology</i> , 4 (2):193-201
	AL	Inoue, N., et al., "High-Fidelity Correction of Mutations at Multiple Chromosomal Positions by Adeno-Associated Virus Vectors", <i>Journal of Virology</i> , 73 :7376-7380 (1999)
	AM	Joziasse, DH., et al., "Characterization of an α 1 \rightarrow 3-Galactosyltransferase Homologue on Human Chromosome 12 That Is Organized as a Processed Pseudogene", <i>Journal of Biological Chemistry</i> , 266 (11):6992-6998(1991)
	AN	Joziasse, DH., et al., "Bovine alpha 1 \rightarrow 3-galactosyltransferase: isolation and characterization of a cDNA clone. Identification of homologous sequences in human genomic DNA", <i>J Biol Chem</i> , 264 (24):14290-7(1989)
	AO	Joziasse, DH., et al., "Murine α 1,3-galactosyltransferase. A Single gene locus specifies four isoforms of the enzyme by alternative splicing", <i>J Biol Chem</i> , 267 (8):5534-41(1992)
J	AP	Joziasse, DH., et al., "Xenotransplantation: The Importance of the Gal α 1,3Gal epitope in hyperacute vascular rejection", <i>Biochim Biophys Acta</i> , 1455 (2-3):403-18(1999)

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J. J. Clark	11/5/01

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<i>JK</i>	AQ	Katayama, A., et al., "Porcine α -1,3-galactosyltransferase: full length cDNA cloning, genomic organization, and analysis of splicing variants", <i>Glycoconjugate Journal</i> , 15 :583-589(1998)
	AR	Koike, C., et al., "Direct Gene Replacement of the Mouse α (1,3)-galactosyltransferase gene with human α (1,2)-fucosyltransferase gene: Converting α -galactosyl epitopes into H Antigens", <i>Xenotransplantation</i> , 4 :147-53 (1997)
	AS	Kroshus, T.J., et al., "Expression of human CD59 in transgenic pig organs enhances organ survival in an ex vivo xenogeneic perfusion model", <i>Transplantation</i> , 61 (10):1513-21(1996)
	AT	Larsen, R., et al., "Frameshift and Nonsense Mutations in a Human Genomic Sequence Homologous to a Murine UDP-Gal: β -D-Gal(1,4)-D-GlcNAc α (1,3)-Galactosyltransferase cDNA", <i>Journal of Biological Chemistry</i> , 265 (12):7055-7061(1990)
	AU	Larsen, R., et al., "Isolation of a cDNA encoding a murine UDPgalactose: β -D-galactosyl-1,4-N-acetyl-D-glucosaminide α -1,3-galactosyltransferase: Expression cloning by gene transfer", <i>Proc. Natl. Acad. Sci. USA</i> , 86 :8227-8231(1989)
	AV	Lavitrano, M., et al., "Xenotransplantation: state of the art", <i>Forum</i> , 9 (3 Suppl 3):74-83(1999)
	AW	Link, C.J., et al., "Eliciting hyperacute xenograft response to treat human cancer: α (1,3) galactosyltransferase gene therapy", <i>Anticancer Res</i> , 18 (4A):2301-8(1998)
	AX	Loi, P., et al., "Embryo Transfer and Related Technologies in Sheep Reproduction", <i>Reprod. Nutr. Dev.</i> , 38 :615-28 (1998)
	AY	Macher et al., "Defining the minimal size of catalytically active primate α 1,3 galactosyltransferase" <i>Glycobiology</i> , 4 :193 (1994)
	AZ	McKensie, IFC., et al., "Distribution of the Major Xenoantigen (gal(alpha 1-3) gal) for Pig to Human Xenografts", <i>Transpl. Immunol.</i> , 2 :81-86(1994)
	BA	Osman, N., et al., "Switching Amino-terminal Cytoplasmic Domains of α (1,2) Fucosyltransferase and α (1,3) Galactosyltransferase Alters the Expression of H Substance and Gal α (1,3) Gal", <i>J. of Biol. Chem.</i> , 271 (51):33105-33109(1996)
	BB	Russell, D., et al., "Human Gene Targeting by Viral Vectors", <i>Nature Genetics</i> , 18 :325-330 (1998)
	BC	Sandrin, M., et al., "Transgenic approaches for the reduction in expression of Gal α (1,3) Gal for xenotransplantation", <i>Frontiers in Bioscience</i> , 2 :e1-11(1997)
	BD	Sharma, A., et al., "Reduction in the level of Gal(α 1,3) Gal in transgenic mice and pigs by the expression of an α (1,2) fucosyltransferase", <i>Proc. Natl. Acad. Sci. USA</i> , 93 (14):7190-5(1996)
	BE	Shulman, M., et al., "Homologous Recombination in Hybridoma Cells: Dependence on Time and Fragment Length", <i>Molecular and Cellular Biology</i> , 10 (9):4466-4472 (1990)
	BF	Smithies, O., et al., "Insertion of DNA Sequences into the Human Chromosomal Beta-Globin Locus by Homologous Recombination", <i>Nature</i> , 317 :230-234 (1985)
	BG	Strahan, KM., "Antisense Inhibition of Pig alpha 1,3 galactosyl-transferase Leads to a Reduction in Expression of the Major Target for Human Natural Antibodies on Pig Vascular Endothelial Cells", <i>Xenotransplantation</i> , 2 :143-147 (1995)
	BH	Strahan, KM., et al., "cDNA sequence and chromosome localization of pig α 1,3 galactosyltransferase", <i>Immunogenetics</i> , 41 (2-3):101-5(1995)
	BI	Strahan, KM., et al., "Pig α 1,3 Galactosyltransferase: a major target for genetic manipulation in xenotransplantation", <i>Frontiers in Bioscience</i> , 1 :e34-41(1996)
	BJ	Strahan, KM., et al., "Pig α 1,3 galactosyltransferase: sequence of a full-length cDNA clone, chromosomal localisation of the corresponding gene, and inhibition of expression in cultured pig endothelial cells", <i>Transplant Proc.</i> , 27 (1):2456-6(1995)
	BK	Strokan, V., et al., "Characterisation of Human Natural Anti-Sheep Xenoantibodies", <i>Xenotransplantation</i> , 5 (2):111-121 (1998)
<i>JK</i>	BL	Tearle, R., et al., "The α -1,3-Galactosyltransferase Knockout Mouse", <i>Transplantation</i> , 61 (1):13-19 (1996)

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